

We claim:

- 1 1. A method for processing multimedia data in a Radio Link Protocol
2 (RLP) layer of a wireless packet network, said method comprising the steps of:
3 processing said multimedia data to determine if said multimedia data is
4 properly received; and
5 forwarding erasure data frames with said multimedia data to a Point-to-
6 Point Protocol (PPP) layer.

- 1 2. The method of claim 1, further comprising the step of forwarding a
2 location indicator of said erasure frames to said PPP layer.

- 1 3. The method of claim 1, further comprising the step of representing
2 said erasure data frames in a predefined form.

- 1 4. The method of claim 3, wherein said predefined form is the original
2 received data frames.

- 1 5. The method of claim 3, wherein said predefined form is a binary
2 pattern comprised of all ones.

- 1 6. The method of claim 3, where said predefined form is a binary pattern
2 comprised of all zeroes.

- 1 7. A method for processing multimedia data in a Point-to-Point
2 Protocol (PPP) layer of a wireless packet network, said method comprising the steps of:
3 receiving erasure data frames with said multimedia data from a Radio
4 Link Protocol (RLP) layer; and
5 replacing said erasure data frames with a predefined binary value.

1 8. The method of claim 7, wherein said predefined binary value is an all
2 zeroes pattern.

1 9. The method of claim 7, wherein said predefined binary value is an all
2 ones pattern.

1 10. The method of claim 7, wherein said predefined binary value is the
2 original received data frames.

1 11. The method of claim 7, further comprising the step of receiving a
2 location indicator of said erasure frames from said RLP layer.

1 12. The method of claim 11, further comprising the step of using said
2 location indicator to detect if a packet header is corrupted.

1 13. The method of claim 12, further comprising the step of forwarding a
2 packet payload to a higher layer if a valid header is received.

1 14. The method of claim 12, further comprising the step of forwarding a
2 packet payload to a higher layer if a valid header is received even if said packet payload
3 is not properly received.

1 15. The method of claim 12, where the PPP layer updates the location
2 indicator and forwards it to a higher layer if a valid header is received.

1 16. A method for processing multimedia data in a receiver of a
2 wireless packet network, said receiver conforming to an open system interconnection
3 (OSI) model, said OSI model having a plurality of layers including a Radio Link Protocol
4 (RLP) layer, a set of interface layers and a User Datagram Protocol (UDP) layer, said
5 method comprising the steps of:

6 processing said multimedia data to determine if said multimedia data is
7 properly received; and
8 communicating error information between said RLP and UDP layers.

1 17. The method of claim 16, wherein said RLP layer forwards an erasure
2 data frame to said set of interface layers.

1 18. The method of claim 17, further comprising the step of forwarding
2 packets with erasure data frames to said UDP layer.

1 19. The method of claim 16, wherein said RLP layer forwards an
2 indication of a location of erasure data to said UDP layer.

1 20. The method of claim 19, further comprising the step of updating the
2 location of said erasure data and forwarding it to said UDP layer

1 21. A system for processing multimedia data in a Radio Link Protocol
2 (RLP) layer of a wireless packet network, said system comprising:
3 a memory for storing computer readable code; and
4 a processor operatively coupled to said memory, said processor configured
5 to:

6 process said multimedia data to determine if said multimedia data is
7 properly received; and
8 forward erasure data frames with said multimedia data to a Point-to-Point
9 Protocol (PPP) layer.

1 22. The system of claim 21, wherein said processor is further configured
2 to forward a location indicator of said erasure frames to said PPP layer.

1 23. A system for processing multimedia data in a Point-to-Point Protocol
2 (PPP) layer of a wireless packet network, said system comprising:

3 a memory for storing computer readable code; and
4 a processor operatively coupled to said memory, said processor configured
5 to:
6 receiving erasure data frames with said multimedia data from a Radio
7 Link Protocol (RLP) layer; and
8 replacing said erasure data frames with a predefined binary value.

1 24. The system of claim 23, wherein said predefined binary value is an all
2 zeroes pattern.

1 25. The system of claim 23, wherein said predefined binary value is an all
2 ones pattern.

1 26. The system of claim 23, wherein said predefined binary value is the
2 original received data frames.

1 27. The system of claim 23, wherein said processor is further configured
2 to receive a location indicator of said erasure frames from said RLP layer.

1 28. The system of claim 27, wherein said processor is further configured
2 to use said location indicator to detect if a packet header is corrupted.

1 29. The system of claim 28, wherein said processor is further configured
2 to forward a packet payload to a higher layer if a valid header is received.

1 30. The system of claim 28, wherein said processor is further configured
2 to forward a packet payload to a higher layer if a valid header is received even if said
3 packet payload is not properly received.

1 31. A system for processing multimedia data in a receiver of a wireless
2 packet network, said receiver conforming to an open system interconnection (OSI)
3 model, said OSI model having a plurality of layers including a Radio Link Protocol
4 (RLP) layer a set of interface layers and a User Datagram Protocol (UDP) layer, said
5 system comprising:

6 a memory for storing computer readable code; and

7 a processor operatively coupled to said memory, said processor configured
8 to:

9 processing said multimedia data to determine if said multimedia data is
10 properly received; and

11 communicating error information between said RLP and UDP layers.

32. The system of claim 31, wherein said RLP layer forwards an erasure
data frame to said UDP layer.

1 33. The system of claim 31, wherein said RLP layer forwards an
2 indication of a location of erasure data to said UDP layer.